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# USSR Report

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10 October 1984

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## MAJOR CROP PROGRESS AND WEATHER REPORTING

### MOSCOW RADIO ON AGRICULTURAL DEVELOPMENTS FOR 11 AUG-15 SEP

LD141157 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 11-14 August. Times of broadcasts are given in parentheses at the end of each item.

#### 11 August

More than 1.25 million metric tons of rough fodder have been laid in Tajikistan. (0204 GMT)

In Stavropol Kray heavy rains are making it difficult to harvest grain in foothill areas. (1300 GMT)

In Belorussia machine operators are working on the harvest on the second million hectares. More than 32,000 combines are at work on the republic's fields. The machine operators of Gomel Oblast have cut grain on 60 percent of the area. (1530 GMT)

#### 12 August

Stavropol Kray: The last hectares of cereal crops are being rescued in near-mountain areas. There have been frequent downpours of rain. Kirovskiy Rayon farms have today begun selling above-plan bread grain to the state. In Kirghiziya cereals have been harvested on a quarter of a million hectare. To date; the main work is now in Issyk-Kul and Naryn Oblasts. Frunze collectives have sent a large group of machine operators to central Tyan-Shan. Soil preparation for next year's harvest is under way in the valley zones of the republic. (0400 GMT)

Harvesting has begun in the virgin lands of N. Kazakhstan and Kustanay Oblasts. In Altay, rye and peas are being harvested. In the country as a whole, the USSR Ministry of Procurement reports, twice as much strong wheat has been delivered as last year. Several oblasts (not named) have already met their quotas for deliveries of high-value and strong wheat.

However, grain procurement has not been organized with precision everywhere. Here's an example; on one farm in the Ukraine over 2,000 metric tons of grain were threshed, but nearly all of it is still on the threshing-floor. Indeed,

the whole of Lebedinskiy Rayon is dragging its heels; there the farms have threshed 80,000 metric tons of grain, of which 90 percent is still lying about. Similar examples could be cited in Kharkov and Dnepropetrovsk Oblasts and Mari ASSR. Gorkiy Oblast has not yet begun bread-grain procurement. (0600 GMT)

Chechen-Ingush ASSR's kolkhozes and sovkhoses have fulfilled their socialist pledges for grain deliveries. More than 50,000 metric tons have been delivered, mainly wheat of strong and valuable strains to be used as seed bank for North Caucasus kolkhozes and sovkhoses. (1530 GMT)

More than 300,000 metric tons of cereals have already been sold to the state in Ryazan Oblast; almost a half of what the plan provides for. Soil is being prepared for next year's harvest. (1530 GMT)

Bashkir ASSR: Grain crops have been cut on an area of more than 1 million hectare here. (1530 GMT)

13 August

Only a few days remain to start of harvest in Omsk Oblast; all equipment has been checked. (0204 GMT)

The 350,000 metric ton of grain has been sold to the state in Ryazan Oblast to date. (0400 GMT)

Less than a 1/3 of the area sown to grain crops remains to be harvested by the agricultural workers of Mordovia. Their work has been complicated by frequent rain, but the machine operators have countered the poor weather with skillful use of equipment. (0600 GMT)

Donetsk: Corn harvesting for silage has begun. (0800 GMT)

The machine operators of the Stavropol steppes today completed their harvest campaign throughout their entire vast grain growing area. In the eastern part of the kray, adjacent to the Caspian, the prolonged drought which began when the sowing of the winter crops was in full swing has been reflected in the amounts threshed. However the collective pledge to sell the state 1.96 million metric tons of grain is being implemented successfully by the Stavropoli people. The kolkhozes and sovkhoses whose land is situated further to the West have decided to make good the shortfall in wheat and barley in the East. Thus the farms of the Petrovskiy, the Novoaleksandrovskiy and the Kirovskiy Rayons are already despatching grain to the elevators over and above the year's plan. (0800 GMT)

The agricultural workers of the areas adjacent to the Black Sea have for the first time achieved the planned yields for winter wheat on irrigated land. Harvesting was completed today on these lands. On average, 45 quintals of grain has been obtained from each hectare, which is 16 quintals more than last year. This is the result of plentiful water supplies for crop irrigation and other progressive agro-technical methods. (0800 GMT)

Tomsk Oblast: The plan for the laying in of haylage has been fulfilled by 104 percent 15,000 metric tons more silage has been laid in than last year. (1100 GMT)

Maritime Kray: Twice as many special storehouses with active ventilation have been built this year, as compared to last year, to assist fodder procurers. The buildings are essentially of ferro-concrete and slate. Air is fed by ventilators through the floor. (1100 GMT)

Altay Kray: 3 million metric tons of fodder have been procured here to date. A third is hay and the remainder high quality haylage and vitamin-rich grass-meal. The plan for laying in of haylage has been fulfilled by more than 500,000 metric tons. All Altay livestock-breeding farms and complexes will have fodder for the wintering season. (1530 GMT)

Early grain crops have been threshed on the whole area sown in Belgorod Oblast: More than 700,000 hectares. (1704 GMT)

The crop growers of Central Kazakhstan have started the harvesting of grain crops. Crops have to be harvested from an area of more than 1 million hectares. The harvesting of fodder crops for silage has begun simultaneously. (1750 GMT)

Selective reaping of grain crops has begun in Kustanay, Tselinograd, Turgay and other oblasts of North Kazakhstan. (2230 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 14, 15 AUG

LD160437 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 14, 15 August. Times of broadcasts are given in parentheses at the end of each item.

14 August

Kursk Oblast farmers are threshing on the last fifth of the area; they are preparing for the autumn sowing--tractors and sowing machines have been repaired, and 650 sowing units have been replenished. The soil is ready: more than half a million hectares have been set aside for winter crops. (0204 GMT)

The first thousand metric tons of winter rye are arriving at reception points in Novosibirsk Oblast intensive work is taking place in Tatarskiy, Chistoozernyy and Vengerovskiy Rayons, where threshing is yielding up to 20 quintals per hectare. A quarter of the oblast's rye has been threshed to date. (0204 GMT)

Kyubyshev Oblast machine operators have begun grain harvesting on the second million hectares. (0400 GMT)

The grain harvest has started in Northern Kazakhstan Oblasts. (0400 GMT)

Kursk Oblast farmers are completing preparations for autumn sowing. This year more than half a million hectares have been set aside for winter crops. (0400 GMT)

Moldavia has completed the harvesting and sale of grain to the state. This year for the first time Moldavia has procured 100,000 metric tons of strong and valuable wheats. (0600 GMT)

Tambov Oblast: Grain and pulse crops have been harvested on 1 million hectares. Another 100,000 hectares remain to be harvested. (0600 GMT)

Tataria: Procurement of grain continues. So far threshing has been carried out on 1 million hectares. (0600 GMT)

15 August

Winter crop shoots have appeared on the fields of Saratov Oblast; a third of the area set aside for them has been sown. (0400 GMT)

Grain harvesting is taking place on second half of area in Bryansk Oblast and is nearing completion. (0400 GMT)

A shock work month for gathering vegetables has been declared in Voroshilovgrad Oblast. (0400 GMT)

The flax harvest is underway in Smolensk Oblast, where a quarter of the RSFSR's flax is grown. (0400 GMT)

Workers of Ukrainian specialized farms have begun mass threshing of seminiferous perennial grasses. Lucerne and sweet clover seeds have been obtained from the first 100,000 hectares. In accordance with the food program, seed-growing of grasses has been made an independent industry and is being developed on an industrial basis. (0900 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 16-18 AUG

LD182251 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 16-18 August. Times of broadcasts are given in parentheses at the end of each item.

16 August

Over 70,000 tonnes of strong and valuable wheat have already been delivered to elevators in Moldavia. (0600 GMT)



Harvesting of corn for silage has started in Kharkov Oblast where over 4 million tonnes of this valuable fodder is to be procured this year. That is a little less than last year. (0600 GMT)

In Kirghiziya mass procurement of fodders continues in all areas. To date, 2,500,000 tonnes have been laid in store. The annual plan has been significantly over-fulfilled. At many farms the third cutting of alfalfa is in progress, for processing into vitamin flour. (1530 GMT)

17 August

To date 52 million tonnes of hay has been procured and 28 million tonnes of silage has been laid in the USSR. Lithuania and Belorussia lead in fodder procurement. (0400 GMT)

Grain growers in southern regions of Krasnoyarsk Kray have begun harvesting. Corn for silage harvesting has opened in Dagestan and Odessa Oblast. Preparation of harvesting equipment has been completed by Azerbaijan cotton growers. (0600 GMT)

More and more areas of Turgay, Tselinograd, Kustanay and other oblasts of northern Kazakhstan are joining in the harvest of grain crops. Preliminary estimates indicate that over 90 percent of all the grain in Turgay Oblast consists of strong and valuable wheat. (0800 GMT)

Selective cotton harvesting has begun in south Turkmenia. (1200 GMT)

The alfalfa harvest has started in Kirghizian. It covers some 50,000 hectares. The mean yield is assessed according to preliminary estimates at over 3 quintals of seed per heap, with best farms of the Chu Valley yielding 5 quintals per hectare of land. About 5,000 tons of seed will be supplied by Kirghizia this year to Belorussia, non-chernozem zone, and the Baltic region. A big consignment of 200 tons will be sent to GDR farmers. (1330 GMT)

Harvesting of corn for silage has begun in Dagestan and Odessa Oblast. (1530 GMT)

Farms in Kazakhstan have so far laid in over 12 million tonnes high-quality hay, which is some 75 percent of the year plan. (1530 GMT)

In Predgornyy Rayon, Stavropolye 20,000 tonnes of wheat delivered to elevators this season. (1630 GMT)

18 August

Kustanay Oblast grain harvest completed on 200,000 hectares to date. (0204 GMT)

Saratov Oblast has procured 200,000 tonnes of wheat, rye and barley to date. (0400 GMT)

Tula Oblast has sold 350,000 tonnes of grain to the state so far, which is three quarters of the state plan. (0600 GMT)

Kursk Oblast is harvesting corn fodder. To date over one third of all the fields have been harvested. (0600 GMT)

Harvesting of grain crops is ending on second million hectares in Belorussia. (1100 GMT)

In the Ukraine farms have fully stocked up with seed for the winter sowing with around 2,500,000 tonnes of grain, predominantly strong and valuable wheat varieties. The area sown to such high-yield varieties as Odesskaya-51, Dneprovskaya, Chayka and Kharkovskaya-81 is being considerable increased. (1300 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 19-21 AUG

LD220245 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 19-21 August. Times of broadcasts are given in parentheses at the end of each item.

19 August

Omsk Oblast grain crops have been harvested on 100,000 hectares to date. (0001 GMT)

Novosibirsk Oblast: One million metric tons of haylage have been procured so far. (0001 GMT)

Ryazan Oblast has sold 400,000 metric tons of grain so far. (0400 GMT)

With harvesting taking place in difficult conditions because of rain and wind, Tataria has so far sold the state 500,000 metric tons of grain. Fodder procurement is continuing. (1530 GMT)

Tula Oblast has so far harvested 350,000 metric tons of grain which is three-quarters of the state plan. (1530 GMT)

In Kursk Oblast harvesting of corn for silage is in progress; one-third of the area has so far been completed. (1530 GMT)

The Belorussian harvest is underway. Farmers will sell the state at least 2 million metric tons of grain. (2000 GMT)

20 August

Tajikistan has begun cotton picking in Vakhsh Valley. (0400 GMT)

Orenburg Oblast has begun winter crop sowing. (0400 GMT)

Virgin lands farms have started delivering the first thousand tons of new harvest wheat and barley. Computers at the oblast computer centers help to direct the grain along the best routes by issuing recommendations for hourly schedules for grain deliveries at 160 grain-receiving enterprises. (1300 GMT)

Mass winter crop sowing has begun in Belgorod Oblast: 430,000 hectares are to be covered. (1300 GMT)

Lithuanians have completed threshing on 2 million hectares. (1500 GMT)

A total of 100,000 metric tons of grain have been delivered to Kirghiz procurement points. Altogether more than 200,000 metric tons of grain, including corn, will be sold to the state by the republic's farmers this year. (1530 GMT)

Scientists of the Leningrad scientific center of the USSR Academy of Sciences have sent to non-chernozem zone farmers plans to improve the land covering the period up to the beginning of the next century. They collected data on all the 29 oblasts and autonomous republics of the RSFSR non-chernozem region and, using computers, worked out measures to improve soil fertility. If now arable land takes up just above 11 percent of the region's entire territory, this area will be doubled by the beginning of the next century. The area is producing even now about 20 percent of the grain produced in RSFSR, half of the potatoes, 43 percent of the vegetables and almost all the flax. (1530 GMT)

Winter rye sowing has started in Maritime Kray; the crop will cover 30,000 hectares. (1704 GMT)

Reaping of grain crops has started on the fourth and last million hectares in Orenburg Oblast. Harvesting has speeded up again after the rains which slowed down the pace of the work. Underwinter fallow is being ploughed at the same time. (2230 GMT)

21 August

In Kirovograd Oblast 500,000 metric tons of grain have arrived at the procurement points. (1530 GMT)

Wheat harvesting has started in Novosibirsk Oblast. (1704 GMT)

Intensive sowing of wheat crops has started in Orenburg Oblast. (1704 GMT)

In Orenburg Oblast a total of 550,000 hectares of fallow has been allocated for sowing to winter rye and wheat. (1904 GMT)

All oblasts are harvesting in Kazakhstan, the republican CSA reports. Kokchetav and Tselinograd Oblasts have begun harvesting. Rye and wheat have been cut

on 500,000 hectares in Kustanay Oblast. In the republic as a whole 7 million hectares or 28 percent of the grain area has been cleared. (2300 GMT)

The first hundreds of metric tons of cotton have been procured in Tajikistan. Selective harvesting is underway in the far south of the republic. Unusually hot weather with 44-45 degrees is being experienced there and efforts are being made to reduce possible losses to the harvest. (2300 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 22-23 AUG

LD240429 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 22-23 August. Times of broadcasts are given in parentheses at the end of each item.

##### 22 August

Mass harvesting of grain is under way on the northern Kazakhstan virgin lands. According to a report from Kustanay, grain occupies more than 4 million hectares. Despite bad weather, grain has been cut on 600,000 hectares in the oblast. (0204 GMT)

In Mordovian ASSR, the harvest is ending, with grain cut on more than 600,000 hectares--about 90 percent of the total area. (0400 GMT)

In Saratov Oblast, ploughing is being carried out on the second million hectare. According to schedule, 80-85 thousand hectares are being plowed daily. Sowing of winter crops continues; they already occupy over 700,000 hectares or two-thirds of the area. (0400 GMT)

In Udmurt ASSR grain crops have been harvested almost on half the area. (0600 GMT)

In Belgorod Oblast farmers have begun sowing winter crops. (0600 GMT)

In Smolensk Oblast farmers have begun winter sowing on 245,000 hectares. (0600 GMT)

Mass harvesting of grain is being carried out by virginlanders of northern Kazakhstan, where harvesting of grain is proceeding in difficult weather conditions. Grain occupies more than 4 million hectares here. (1530 GMT)

Grain has been harvested on 250,000 hectares in Kurgan Oblast--that is, almost 15 percent of the whole area. (1530 GMT)

Along with the harvest, farmers are taking care over next year's harvest. Soil preparation is underway for the winter spring-crop sowing. The boundary of the autumn sowing is moving from the north to the south. The first seeding machines have gone out into the fields of the Don, the Kuban, Stavropol Kray,

and autonomous republics of the northern Caucasus. Altogether, winter crops occupy not much less than 6 million hectares. This is a quarter of the plan. At an overwhelming number of collective and state farms great care is being shown to observe the optimum times and high quality of work. However, the mistakes of past years are being repeated in the oblasts of Siberia: when winter crops were sown late, shoots did not succeed in developing in time before the frosts, and as a result the yields turned out to be lower than calculated. This year intensive technology is being used for the first time on large areas for the cultivation of winter grain crops, which guarantees a steady and high yield. The fields are being sown with seeds from best varieties. (1800 GMT)

23 August

Some 100,000 hectares of grain remains to be harvested in Kirghiz SSR. Despite the dry, hot summer, farmers in the Tyan Shans are getting yields of almost 30 gutals per hectare, much more than last year. (0030 GMT)

Harvest continues throughout the RSFSR and in Kazakhstan. Over half of the grain area has been harvested. In Orenburg Oblast, over half a million hectares of bread-grain has been cut during the past week. In central Asia, corn has been gathered from more than 50,000 hectares. (0204 GMT)

Grain crops have been sown on 500,000 hectares in Kazakhstan to date. This is almost a quarter of the area. Fallow preparing is coming to an end. There are 5 million hectares of fallow in Kazakhstan at present. (0430 GMT)

Grain harvest is closing in the Kirghiz SSR. (0600 GMT)

Grain harvest is going well in Irkutsk Oblast on the river Angara. (0600 GMT)

Kursk Oblast has started sowing winter crops. (0600 GMT)

Belorussian farms are on their third grass cutting. (0600 GMT)

Orenburg Oblast mechanisers are completing reaping grain on the third million hectares. (0800 GMT)

Moscow Oblast farms are harvesting potatoes. (0800 GMT)

Karaganda basin mine has fulfilled the eight months' plan.

About 30 farms in Bryansk Oblast have fulfilled the plan for selling grain to the state. Harvesting is coming to a close. The right time has come for sowing winter crops; rye and wheat have to be sown on 340,000 hectares in 20 days. (1530 GMT)

Sowing of winter crops has begun in the northern rayons of Belorussia. (1530 GMT)

Ryazan Oblast: Harvesting machinery has gone out into corn fields. The crop is destined for silage for livestock and has to be gathered from almost 160,000 hectares. The crop is a good one; many farms are harvesting 300-350 quintals per hectare. (1530 GMT)

Workers from Novosibirsk enterprises and organizations have helped farmers to procure fodder for public livestock by laying in over 200,000 tons through their work. (1530 GMT)

Mountain farms of Shamkhorskiy Rayon, Azerbaijan, have today finished dispatching early potatoes to the country's industrial centers. About 13,000 tons of potatoes have been sold to the state, almost 3,000 tons more than planned. Harvesting was completed with no waste. (1530 GMT)

Daghestan: Harvesting of early varieties of table grapes is underway. (1530 GMT)

Uzbek land reclamation workers have turned a vast tract of land in the Karshinskaya steppe into fertile fields; machine operators of Nishanskiy Rayon today began sowing corn on 1,300 hectares reclaimed of virgin land to improve the structure of the soil. Next year cotton will be sown on these plantations. (1530 GMT)

Harvesting is ending and winter sowing starting in the Mordovian non-chernozem zone. As a result of complex weather conditions it will not be easy to sow the planned areas of more than 300,000 hectares in time. (1800 GMT)

Hay-mowing has begun in Kazakhstan on the 28 millionth hectare. (2005 GMT)

Sugar beet harvest has begun in the Ukraine; it takes up an area of 1.7 million hectares. The harvest is not bad. (2230 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR AUGUST 24-25

LD260259 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 24-25 August. Times of broadcasts are given in parentheses at the end of each item.

24 August

In Novosibirsk, over 200,000 tons of fodder has been produced. (0001 GMT)

Northern rayons of Belorussia have begun sowing winter crops. (0204 GMT)

Sowing of interim fodder crops--rye, rape, and (perko)--has begun in Uzbekistan. (0600 GMT)

The sowing of winter crops has started in Kharkov Oblast. The area to be sown is over 600,000 hectares, which is 60 percent of the grain acreage. (1530 GMT)

In the Vakhsh Valley, Tajikistan, the corn yield is 70-90 quintals per hectare. Corn harvesting also started in the Gissar Valley today, where the crop is also good. (1530 GMT)

In Georgia, the highest corn yield has been obtained from a new hybrid, the Gruzinskaya-9, which on experimental areas in Gardabanskiy, Signakhskiy and Zestafonskiy rayons produced 8-10 quintals of grain more [as heard, presumable per hectare] than non-bred varieties. Following the successful trials, the hybrid will be used on the majority of grain farms in the republic next spring. (1530 GMT)

25 August

More than 10,000 combines are harvesting in Tselingrad Oblast. (0001 GMT)

Harvesting of grain and pulses has been completed in the southern and western rayons of Belorussia, with 4-5 quintals per hectare more than last year, despite difficult conditions. (0400 GMT)

Grass-cutting is ending in Kazakhstan. More than 13 million tons of hay have already been prepared. (0700 GMT)

The rate of harvesting in the Bashkir ASSR is increasing. To date bread grain has been threshed on 2 million hectares, which is 2/3 of the grain crop area of the autonomous republic. Farmers have dispatched to state granaries 800,000 tons of grain of the new harvest. (1100 GMT)

Grain harvesting is continuing in Tselinograd Oblast. By today 600,000 hectares had been reaped or 1/5 of the area sown. (1100 GMT)

Corn is being harvested in Altay Kray. It covers 600,000 hectares and the harvest is better than last year's. (1100 GMT)

Winter crops have been sown on more than 200,000 hectares in Mordovia, more than 70 percent of the total planned. (1100 GMT)

Mass harvesting of cotton has begun in Azerbaijan. The harvest is a good one. Southern and western regions of Belorussia have completed harvesting of grain and pulse crops. Cutting of grasses is being completed in Kazakhstan: more than 13 million tons of hay have already been procured for public livestock. (1400 GMT)

Mass sowing of winter crops has begun in Volgograd Oblast. An area of more than 1.7 million hectares has been prepared for the purpose. In this year's difficult hot conditions, the best farms in Mikhaylovskiy Rayon have gathered up to 40 quintals per hectares of winter wheat. (1200 GMT)

In Belorussia over 1 million hectares are to be sown to rye. Winter sowing has begun. (1300 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 26-27 AUG

LD280513 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 26-27 August. Times of broadcasts are given in parentheses at the end of each item.

26 August

In Tselinograd Oblast, grain crops have been cut on 600,000 hectares, a fifth of the total. (0104 GMT)

Cotton harvesting has begun in Azerbaijan. (0104 GMT)

Rybnovskiy Rayon has fulfilled the year's quota, and continues above-plan sale of wheat, rye, and barley. The rayon has produced nearly 20,000 tons of grain. (0204 GMT)

Ryazan Oblast has delivered 450,000 tons of grain. Seven rayons have fulfilled their quota, and the pace is not slackening. (0400 GMT)

Winter sowing has been carried out on 200,000 hectares in Kursk Oblast, where winter crops will occupy over half a million hectares in all. (0400 GMT)

The Ukraine has begun processing new-harvest sugar beets. Most of the factories have been modernized for the new season, increasing daily output by 8,000 tons. The republic's 190 factories will produce nearly two-thirds of the USSR's sugar. (0400 GMT)

Grain has been cleared from over a third of the total area in the Udmurt ASSR. (1200 GMT)

The 300,000th ton of grain has been sold to the state in Orel Oblast. (1500 GMT)

The cotton harvest has started in Turkmenistan, 1.24 million tons are to be harvested. (1500 GMT)

Winter sowing has begun in Estonia. (2304 GMT)

27 August

The corn harvest has begun in Syr Darya Oblast. (0001 GMT)

The Odessa Selection and Genetic Research Institute has begun dispatching new varieties of crops for winter sowing to the RSFSR and Moldavia. The varieties include hard wheat capable of yielding 50 to 70 quintals per hectare. (0100 GMT)



In Stavropol Kray more than 600,000 tons of hard wheat has been sent to elevators since the harvest started. (0400 GMT)

In the Udmurt ASSR 100,000 tons of newly harvested grain has been delivered to procurement points. (0400 GMT)

Corn harvesting is near completion in the Ukraine. (0600 GMT)

Corn has been harvested on 100,000 hectares in Kursk Oblast. (0600 GMT)

Tselinograd Oblast farmers completing harvesting on the first million hectares. (0800 GMT)

In Altay Kray grain crops have been cut on the first million hectares. (1100 GMT)

The Bashkir ASSR is harvesting on the 3 millionth hectare. (1500 GMT)

Stavropol farmers have delivered over 600,000 tons of strong wheat so far this season, almost as much in the first 3 years of the 5-year plan. (2130 GMT)

Mass sowing of winter grain is in progress in Tambov Oblast. An area of 520,000 hectares of well-prepared and fertilized soil has been allocated for rye and wheat there. (2230 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 28-29 AUGUST

LD300450 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 28-29 August. Times of broadcasts are given in parentheses at the end of each item.

28 August

Buckwheat and millet harvest has started in Pavlodar Oblast. Rice harvest has begun in Kzyl-Orda Oblast. (0100 GMT)

In Tambov Oblast mass sowing of winter crops is under way. (0400 GMT)

In Orenburg Oblast reaping and threshing of grain crops is taking place on the four millionth and final hectare. (0600 GMT)

The Kazakhstan Central Statistical Administration has reported today that over the past week grain was gathered in from almost 5 million hectares. On average, grain crops are being cut and threshed from 700,000 hectares every day. Machine operators have already threshed wheat on over 1.5 million hectares in Kustanay Oblast. In Tselinograd Oblast, grain cutting is under way on the second million hectare. Up to today, the farmers of Kazakhstan have gathered in grain crops from an area of 11,853,000 hectares, or 48 percent of the area sown to grain. (0600 GMT)

A good grain crop has been grown in Tomsk Oblast, but prolonged rain and hurricane winds have flattened it, which is delaying harvesting. Three hundred young machine operators from Saratov Oblast have arrived to help. The target date for harvest completion here is 10 September. (0800 GMT)

Selective picking of cotton has begun in the north of Leninabad Oblast of Tajikistan. Five cotton cleaning works are processing the new crop in the republic now. (0800 GMT)

The Kuban farmers have started mass harvesting of sunflowers in the southern and central rayons. Harvesting in August has been made possible by sowing early ripening, high-yield hybrids. (1000 GMT)

Mass sunflower harvest has started in the Kuban. Combines went out into the fields in southern and central rayons today. Weather is hampering effective use of machinery; there is rain almost every day and sometimes hail. The damp soil hinders vehicles, and some plantations are under water. Mobile pumps are being used to drain off the water. Machine operators are maneuvering machinery skillfully and using every hour of good weather. (1100 GMT)

In the Donbass almost 500,000 hectares is to be sown to winter crops this year. (1300 GMT)

Cotton processing began in the Turkmen USSR today. More than 1 million tons is to be processed, including more than 300,000 tons of fine fibre variety. (1300 GMT)

Belorussia's farms are harvesting grain on the last hectares. Only 10-15 days were required by the mechanized detachments to gather in the harvest for 1984 in the optimum time and without losses. On the average, more grain was threshed per hectare in the republic than last year. The agriculturalists of the flax-sowing collective and state farms are gathering in the flax. Half of it has already been pulled and sent off. The machine operators of the northern areas have brought out the sowing units onto the fields. From 1 September mass sowing of winter crops will begin on all farms. The winter crop area in the last year of the five-year period will take up almost 1.5 million hectare. (1330 GMT)

Smolensk farmers have reaped grain crops from half the area, and have delivered to the state the first 100,000 tons. (1530 GMT)

In Altay Kray, 1 million hectares of grain has been reaped. (1530 GMT)

In the RSFSR, to date reaping has been carried out in West Siberia on 27 percent of the area. A good corn harvest has been grown in Siberia; to date it has been reaped on an area of 4,000,000 hectares. Mass flax harvesting is in progress in central Russia. Winter sowing has been carried out on an area of over 10 million hectares, or 45 percent of the plan. Sowing is going well in general, but in some places, such as Archangel and Vologda Oblasts, it has been delayed. About a quarter of the winter sowing is being done on intensive technology on bare fallows. Fallow has been plowed to date on 1/5 of the area.

In Kaluga, Smolensk, Kirov and some other oblasts of the non-chernozem zone this work has been delayed. (1800 GMT)

The RSFSR Central Statistical Directorate has compiled a bulletin on the progress of the harvest. It is noted that intensive work is now continuing on the kolkhozes and sovkhozes in the non-chernozem zone along the Volga and in the Urals. Of late the pace of the harvest has increased sharply in Siberia. Among arable-land fodder crops, the largest area is planted in corn in the farms of the republic. This has now been reaped on 4 million hectares. The statistical summary contains figures about winter sowing. Already, this work has reached the borders of Rostov Oblast more than 10 million hectares of fields have been sown, or 45 percent of the plan. Overall, the sowing is proceeding successfully. (2000 GMT)

The Novosibirsk grain harvest continues. (2005 GMT)

29 August

Tatar ASSR farms are completing the grain harvest. More than 500,000 tons of grain have been delivered. (0400 GMT)

Kursk farmers are completing the harvest of sugar beets; the crop has been planted on 190,000 hectares. (0400 GMT)

Altay Kray farms have started to harvest buckwheat. (0800 GMT)

Ryazan Oblast's potato lifting has begun. (0800 GMT)

Novosibirsk Oblast farms have started sales of wheat to the state. (1100 GMT)

This year's harvest has become a serious trial for Amur farmers. Downpours of rain causing high water and floods have been halting the progress of field work. In this complex situation, grain farmers are using every opportunity to harvest the crop. To date grain crops have been reaped and threshed from almost 40 percent of the area. To carry out the harvest as quickly as possible, tracked combines are working in two shifts on many farms. Mass procurement of fodder is also in progress. (1100 GMT)

Harvesting has been completed in the Ararat Valley. Many farms are getting 40 quintals per hectare of wheat. (1300 GMT)

River tramlines and self-propelled barges have replaced land transport to collect the harvest in the floods on the Amur. The water routes have been laid from the railway embankment to the edge of the potato fields protected from floods by earth dykes. Leninskaya station, having become a kind of moorage for river vessels, had been turned into a major transportation headquarters for dispatch of the potato crop. On plantations of Leninskiy, Oktyabrskiy, and other rayons, students, patrons from Khabarovsk, and other cities of the kray and rural people are working. The crop must be taken literally from under the water. (1300 GMT)

One-third of the sunflower and corn acreage has been harvested in Novosibirsk Oblast. (1530 GMT)

About 150,000 tons of grain has been delivered to the state granaries in Tyumen Oblast. This is one-quarter of the plan. (1530 GMT)

Chu Valley, Kirghizia SSR: Sufficient sugar beet seeds have been grown this summer to sow 800,000 hectares in the spring. In the next few years, sugar beet seed production in the Kirghiz SSR is to reach 22,000 tons. (1530 GMT)

Throughout the USSR sown and natural grasses have been reaped on the first cut on 77,200,000 hectares; 58.2 million tons of hay have been laid in, 62.9 million tons of haylage, and 53 million tons of straw, chaff, and other coarse fodders. (1830 GMT)

Sowing of winter crops is spreading on farms of northern regions of Belorussia. Rye, the main grain crop of the republic, will be planted on an area of more than 1 million hectares this year. (2230 GMT)

MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 30 AUG - 1 SEP

LD020331 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 30 August - 1 September. Times of broadcasts are given in parentheses at the end of each item.

30 August

All oblasts of Kazakhstan have begun autumn ploughing. Sowing of winter crops is also taking place. (0400 GMT)

Sowing of winter crops is taking place in the northern areas of Belorussia. (0400 GMT)

31 August

In Kokchetav Oblast grain is being harvested on the second million hectares. (0400 GMT)

Poltava Oblast farms have begun mass sugar beet harvesting. (0400 GMT)

Rice harvesting has begun in Tajikistan, in Leninabad Oblast, where average yield is 80 quintals per hectare. (1000 GMT)

To date 1 million tons of grain have been delivered to state granaries in Bashkiria. Ploughing of under-winter fallow and sowing of winter crops are taking place on farms where the fields have been cleared of straw. (1200 GMT)

A rice harvest of grains has been grown this year in Prikamye. Permskiy Rayon farms are on average obtaining 23 quintals per hectare. (1530 GMT)

Belgorod Oblast machine operators have got sowing of winter crops underway on the second half of the area allotted. Favorable rains everywhere have created ideal winter sowing conditions. (1530 GMT)

Collective and state farms of Tyumen Oblast are continuing to lay in stocks of fodder for public livestock. Plans in the oblast for the procurement of haylage and grass meal have been overfulfilled and hay-stacking plans have been fulfilled by 93 percent. (1530 GMT)

Harvesting-time has arrived in hop fields of the Chuvash ASSR, they occupy the largest area in the Russian Federation. Harvesting today is mechanized on almost three-quarters of the whole area allotted. (1530 GMT)

The crop growers of the Altay completed today the cutting of grain crops on the second million of hectares. The crops have been threshed on half of that area. The pace of work is faster than last year, in spite of complex weather conditions. The total area for harvesting exceeds 4 million hectares. (1630 GMT)

1 September

Tselinograd Oblast farmers have threshed grains from half the area covered by grain crops. (0204 GMT)

Mass potato harvesting began today in Ryazan Oblast, where the crop covers nearly 97,000 hectares. (0204 GMT)

Grain crops have been threshed on half of the area given over to them in Kurgan Oblast. In recent days frequent rain has been falling here and this is hampering fieldwork. Machine operators are maneuvering equipment and harvesting low stemmed and fully matured grains without mowing down the swathes. (0600 GMT)

The pace of the harvest is heating up in Kazakhstan threshing grains has been completed on half the sown area, almost 12.5 million hectares. Having coped with the harvest of barley, many farms have begun harvesting the main cereal crop, wheat. (1300 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 2-3 SEP

LD040136 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 2-3 September. Times of broadcasts are given in parentheses at the end of each item.

2 Sep

In Kazakhstan threshing of grain began on the second half of the acreage today. Tataria is completing reaping of buckwheat. In Smolensk collecting of flax is ending. In Kirghizia cotton harvesting has begun. In Tajkistan northern areas have followed southern areas in starting the cotton harvest. (0800 GMT)

Last batches of selected grain have been dispatched to various regions of the country today from Kiev Oblast. At the Mironovskiy Scientific Research Institute of seed-growing and selection of wheat, preparation of elite seeds of winter crops has been completed; this season seed-growers have given farmers altogether about 6,500 quintals of high-quality sowing material. (1200 GMT)

About 400,000 hectares of winter crops sown to date in Tambov Oblast. Three-quarters of area to be sown. (1500 GMT)

Rice collective and state farms have begun harvesting in Astrakhan Oblast. (1704 GMT)

The buckwheat harvest is coming to an end in Tatariya. This crop occupies 80,000 hectares here. (1204 GMT)

3 September

Altay farmers have harvested grains on 2 million hectares. (0104 GMT)

Perm Oblast has begun in Mordovia, where the crop occupies more than 30,000 hectares. (0204 GMT)

In Belorussia sowing in the south starts in Gomel and Grodno Oblasts. (0800 GMT)

Sokhalin farmers out in fields gathering potatoes. In southern Sakhalin yields are between 150 and 170 quintals per hectare. (1100 GMT)

The Verkhovye Rayon is the first in the Orel Oblast to fulfill the state grain plan--about 40,000 tons of grain have arrived in procurement centers. (1100 GMT)

Kustanay machine operators begin reaping grain on the third million hectares. (1500 GMT)

Bryansk Oblast has begun harvesting potatoes from 160,000 hectares. (1500 GMT)

One million hectares of grain crops have been reaped in Pavlodar Oblast, Kazakhstan. This is over half the total. Crops have been threshed on 800,000 hectares. (1830 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 4-5 SEP

LD060037 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 4 September. Times of broadcasts are given in parentheses at the end of each item.

4 September

Kustanay Oblast farmers harvested cereals from 2 million hectares. (0104 GMT)

Tomsk Oblast farmers have today finished harvesting barley; combiners are now off to harvest spring grain. The protracted spring and cold summer have delayed the time of ripening of grains. (0204 GMT)

Kirghiz farmers have laid in 3 million tonnes of fodder. The republic's farmers have overfulfilled haylage production plans, and many have completed the third cut of perennial grasses. Mass laying in of corn silage is now underway. (0204 GMT)

Winter grains have been sown on more than 1 million hectares in Saratov Oblast. Farmers are also preparing land for spring crops, and have so far prepared 2 million hectares. (0400 GMT)

Corn for grain harvest has begun in Chechen-Ingushetia. (0600 GMT)

Winter crop sowing has begun in Kursk Oblast. (0600 GMT)

Mass beet harvest has started in Vinnitsa Oblast in the Ukraine. (1100 GMT)

Third reaping of clover and alfalfa has begun in Estonia; plan for green fodder procurement has already been fulfilled. (1100 GMT)

In Orenburg Oblast harvesting is being completed on the 4 millionth hectare, 90 percent of the grain area. The weather is unstable and wet, and grain with an increased moisture content is reaching elevators. Grain reception and processing are being carried out round-the-clock. (1100 GMT)

5 September

Farmers of Sverdlovsk Oblast have threshed grain on half the total area. (0600 GMT)

Harvesting of winter wheat and barley has been completed in Kunsangirskiy Rayon, Tajikistan. Average threshing yields are 40 q/ha. (0600 GMT)

In Kursk Oblast half a million hectares has been sown to winter crops. Beet lifting has started. (0600 GMT)

Half a million tonnes of grain has been delivered to the elevators in Altay. The reaping and threshing of the most labor-intensive crop--winter rye--is basically finished in the kray. This has given a good yield for Siberia. The plan for sale of winter rye to the state has been over-fulfilled twofold. Daily 50,000 tonnes of Altay grain from the spring crop is reaching state procurement points. (1100 GMT)

It is reported from Krasnodar that Kuban has begun sale of grain-corn to the state. Harvesting of the crop has begun in southern and central rayons. Yields of 50-60 and more quintals per hectare are being obtained. (1200 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 6-8 SEP

LD090810 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in



Russian on 6-8 September. Times of broadcasts are given in parentheses at the end of each item.

#### 6 September

About 40 percent of grain crops have been thrashed in the Kokchetavskaya Oblast in Kazakhstan. (0400 GMT)

Kurgan Oblast: Harvest of grain crops is in progress on the second million hectares. (0400 GMT)

Potato lifting started in Belorussia. The total area there is 357,000 hectares. (0400 GMT)

Pavlodar Oblast is beginning reaping and threshing grains on the second million hectares. (0600 GMT)

Sowing of winter crops is taking place on the last 10,000 hectares in Mordovia today. About one-third of this is on fallow land. This year, the republic's winter crop area will be in excess of 300,000 hectares. (0600 GMT)

Sugar-beet harvest has begun in Stavropol Kray. (0600 GMT)

Corn harvest has commenced in North Ossetia. (1100 GMT)

Stavropolye: All is ready for autumn sowing. (1100 GMT)

The grain harvest has been completed by farms in Krasnokamsk Rayon of Bashkiriya. About 22,000 tons has been laid in state granaries, which is almost double the planned task. (1230 GMT)

Buckwheat has been sown on nearly 200,000 hectares in Kazakhstan. Mass harvesting of this crop began today. (1530 GMT)

#### 7 September

In Kazakhstan, grain and pulse crops have been reaped on 75 percent of the sown area, of 18,600,000 hectares. Threshing has taken place on 17 million hectares. In the south, grain harvesting has ended. In the north, it is in full swing. (0430 GMT)

Belgorod farmers ended sowing winter crops. (0800 GMT)

Mass sowing of rape has opened in the Ukraine where 250,000 hectares have been sown to it. (1100 GMT)

Frontranking kolkhozes and sovkhozes of Tyumen Oblast report the fulfilment of the annual plans of grain sales. For instance, the Zavodoukovskiy Rayon has fulfilled ahead of schedule the plans of procurement of grain not only of the current year, but of the current 5-year plan. In less than 4 years,

the granaries of the motherland have received more than 210,000 tons of grain. (1530 GMT)

The Krasnokamsk Rayon of Bashkiria is the first in the republic to report the fulfillment of socialist pledges regarding the sale of grain to the state. The granaries have received 21,500 tons of grain. The plan of 4 years of the 5-year plan has also been fulfilled ahead of schedule. (1530 GMT)

The farms of Checheno-Ingushetia today began mass harvesting of corn for grain. The yields are good. (1530 GMT)

Processing of the sugar-beet harvest has begun in Northern Caucasus. The first 1,000 tons of sugar has been produced. From Kishinev, it was reported that specialized enterprises in Moldavia have received the first deliveries of high-quality production from the new-harvest sunflower seed. (1830 GMT)

Farmers in Amur Oblast have started harvesting on the second million hectare. The fields are excessively waterlogged following flooding. Many farms in the oblast have already laid in seed stocks. Sales of grain to the state are continuing. (2230 GMT)

8 September

Mass potato lifting is in progress in Kurgan. (0204 GMT)

Further two rayons in the Ryazan Oblast have fulfilled grain sales plan. (0400 GMT)

Tajikistan: Treatment of cotton plants before harvest starts. (0400 GMT)

Ukraine: The 100,000th ton of sugar has been produced from new-harvest beet. Target: at least 32-33 quintals of sugar per hectare. (1100 GMT)

Selective harvesting of rice has started in Surkhandar'ya Oblast. (1100 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 9-10 SEP

LD110135 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 9-10 September. Times of broadcasts are given in parentheses at the end of each item.

9 September

To date, 75,000 tons of raw cotton has reached reception points in Tajikistan. Kurgan-Tyube Oblast is in the lead, having harvested over 50,000. It is planned that this year combines will harvest 300,000 tons, almost one-third of the crop. (0030 GMT)

Mass harvesting of sugar-beet begun in Mordovia. (0100 GMT)

Kazakhstan: Grain harvested on 10 million hectares. (0104 GMT)

Belgorod Oblast: Winter crops sowing ended. (0104 GMT)

Ryazan: Winter crops sowing ended. (0400 GMT)

Kursk Oblast: Sugar beet harvest in progress. (0400 GMT)

Moldavia: Sunflower seeds are being gathered. (0400 GMT)

A total of 75,000 tons of cotton procured in Uzbekistan today. (0600 GMT)

Checheno-Ingush beet root harvesting began. (0600 GMT)

Priamurye vegetable harvesting progress. (0600 GMT)

Two-thirds of grain has now been harvested in Altay. Most of it has also been threshed. Almost 70,000 tons of grain, mostly strong and hard wheat, reaches elevators every 24 hours. (1000 GMT)

Mass potato-harvesting in hand in Estonia. Total harvest of about 500,000 qu. expected. (1300 GMT)

Tselinograd correspondent V. Lyashko on progress of harvest in North Kazakhstan: Harvesting in the republic's virgin land oblasts is now being conducted already on the second half of the sown area. Almost 90 percent of our grain consists of strong and valuable wheat varieties. At Shortandy elevator, for instance, I was shown a batch of wheat where the gluten content--and this is the main quality indicator--was over 40 percent. Such grain, as you know, is being accepted with additional bonuses over and above the basic price. But so far there has been quite a lot of controversy in this matter. This year the Procurements Ministry has altered the system of mutual settlements. Now half of the profit obtained from the marketing of strong wheat will return to the farms. Moreover, at four elevators in the country an experiment is being conducted this year. Receiving strong wheat with a humidity from 15 to 19 percent, now a correcting coefficient for each percent of humidity is being introduced. This makes it possible to assess grain quality more objectively. Both innovations will no doubt make it possible to increase the production and procurement of strong wheats and will strengthen the farms' economic position. (1800 GMT)

10 September

Rice harvest starts in the Kuban River area. (0204 GMT)

The agricultural workers of Kazakhstan today commenced cutting grain crops on the 22d million hectares. This is nearly 85 percent of the republic's entire grain planting. (0800 GMT)

Rostov Oblast: Sowing of winter wheat has started on the second million hectares. (1100 GMT)

Tajikistan: About 900,000 tons of cotton has been procured to date, which is almost triple the figure at the same time last year. (1100 GMT)

Belgorod Oblast: Mass harvesting of sugar beet started today. (1100 GMT)

Mass beet harvesting under way in Belgorod Oblast. (1300 GMT)

Sugar beet harvest has started in Orel Oblast. (1530 GMT)

Chu Valley farmers in Kirgizia have started mass harvesting of corn for grain. (1530 GMT)

Corn harvest has started in Odessa Oblast. (1530 GMT)

Feed harvesting has recommenced in Khabarovsk Kray. The floods along the Amur washed away almost one-fifth of the hay made. To make up losses, mowers and pick-up balers equipped with caterpillar tracks are being used on the wet soil. Where machines cannot be used, scythes are being employed. (1530 GMT)

Harvesting is ending in Kurgan Oblast. Grain crops are to be threshed on one-tenth of the area. (2230 GMT)

Cotton picking has opened in Karakalpakia, where 450,000 tons have been pledged for sale to the state. (2230 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 11-12 SEP

LD130310 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 11-12 September. Times of broadcasts are given in parentheses at the end of each item.

11 September

Tomsk Oblast: 100,000 hectares of grain has been threshed. (0204 GMT)

Perm Oblast: Two more rayons have begun selling grain above plan. (0400 GMT)

Saratov Oblast: Three-fourths of allocated area has been plowed--3 million hectares.

Ryazan combine workers have produced their 1,000th KFK-4-1 self-propelled potato harvester. It is the only works in the country producing potato combines. (0400 GMT)

Harvesting of grain nearly completed in Kurgan Oblast. (0600 GMT)

Kursk Oblast: Farms have delivered 150,000 tons of sugar beet to date. (0600 GMT)

12 September

Altay Kray: 1 million tons of grain procured. Tajikistan: 100,000 tons of cotton procured. (0104 GMT)

Uzbekistan: First 100,000 tons of cotton to be harvested today. (0204 GMT)

Novosibirsk farmers harvesting on 2nd million hectares today. (0600 GMT)

Altay drivers performing well in grain harvest transport. (0600 GMT)

Labor feat in harvest at named Chechen-Ingush farm. (0600 GMT)

Winter crops have been sown on nearly half planned area in USSR. Report on feat in Kurgan Oblast. (0600 GMT)

Apple harvest is underway countrywide. The harvest is a good one this year. (0600 GMT)

In Kazakhstan, 2.2 million hectares have been allocated for winter grain crops. By today, sowing had been completed on half this area. (0700 GMT)

The cotton harvest has begun in southern Turkmenia. (1300 GMT)

Moldavia is now the largest supplier of sunflower seed to the other union republics. (1300 GMT)

Grain has been harvested from over 4 million hectares in Orenburg Oblast. (1300 GMT)

The first 100,000 tons of sugar beet has been delivered to plant reception points from Kursk state and collective farms. (1530 GMT)

Almost 150,000 tons of grain have been delivered to state granaries to date by farmers of Kzyl-Orda Oblast, the main rice-growing area of Kazakhstan. This is almost 40 percent of the plan. (1530 GMT)

Latvian farms have begun third cutting of grasses. (1530 GMT)

#### MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 13-15 SEP

LD170545 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 13-15 September. Times of broadcasts are given in parentheses at the end of each item.

13 September

Harvesting is over in Orenburg Oblast where an area of over 4 million hectares has been cleared. Almost 150,000 tons of grain has been procured in Kzyl-Orda Oblast, which is about 40 percent of plan. Rice harvesting in Syrdarya is going well. (0204 GMT)

Harvesting of grain crops has been completed on 3 million hectares in the Altay. The last 1 million hectares is being reaped and a lot of the crop has been threshed. (0700 GMT)

In Kazakhstan, sown and natural grasses have been harvested on 30 million hectares, which is 97 percent of the planned total. (0730 GMT)

Winter crop sowing has been completed in Altay Kray. Winter rye has been sown on 300,000 hectares, which is more than the plan. (1750 GMT)

Omsk Oblast has delivered 500,000 metric tons of grain. (2230 GMT)

14 September

Fodder layers-in of Kazakhstan are completing grass mowing. They have already cleared sown and natural grass from 30 million hectares, which is 97 percent of the plan. About 14 million tons of hay and 3.5 million tons of haylage have been laid in for public sector animal husbandry. Thirteen of Kazakhstan's 19 oblasts have over-fulfilled the annual plan for laying in haylage; almost 300,000 tons of this valuable green fodder above plan has been stored. Harvesting of silage crops is ending in Novosibirsk Oblast. About 10 million tons of green mass has been laid in; the average yield in the oblast exceeds 200 quintals per hectare. (0001 GMT)

Farmers of the Don are completing sowing of winter wheat. It has already been sown on 1.6 million hectares here, which is four-fifths of the whole grain area. (0730 GMT)

Corn for fodder harvesting has ended in Belgorod Oblast. Despite unfavorable weather conditions, quite a good harvest has been reaped with an average yield of 200 quintals of green mass per hectare. In all, oblast farmers have laid in 2.5 million tons of succulent fodders--half a million tons more than last year. (1300 GMT)

Orenburg Oblast farms have started grain corn. The acreage sown to this crop has been expanded. Grain corn will become one of the main sources for supplementing forage resources. Grain corn procurement has been organized according to a wasteless technology. The nongrain part of the harvest is also being used for fodder purposes. (1400 GMT)

The machine operators of Omsk Oblast have harvested 1.7 hectares of grains to date, i.e. three-quarters of the total cornfield. (2230 GMT)

15 September

Stavropol Kray has over 40,000 hectares planted to sugar beet. Mass harvesting of beet has begun and a yield of 1 million tons is pledged. Corn harvesting for silage has ended in Belgorod Oblast. In spite of unfavorable weather, a "not bad" harvest of about 200 quintals per hectare has been obtained. (0104 GMT)

A good potato harvest has been grown in Belorussia. It is intended to sell 2 million tons of potatoes to the state. (0204 GMT)

Altogether Krasnoyarsk agriculturists will dispatch some 1.5 million tons of grain this year. Harvesting of sunflower has started in Nikolayev Oblast. From this year onwards, sunflower has become a wasteless crop in the oblast. The stalk and the husks of the seeds are being used as raw material for the production of nutrient yeast. (0600 GMT)

In Lipetsk Oblast, the sowing of strong wheat was completed today on 130,000 hectares. In Moscow Oblast, a potato-lifting and loading weekend [subbotnik and voskresnik] is being held. The target: at least 1,500 tons. The sugar-refining season has begun in Belgorod Oblast. At least 3.2 million tons of beet will be processed. (1300 GMT)

Sugar beet harvest is in progress in Altay; 60,000 hectares to be harvested. (1500 GMT)

Omsk farmers have cleared grain from 1.7 million hectares. This is three-quarters of the total area. Almost half of the grain sold to the state comprises strong and valuable wheats. Altay farmers are preparing seed for next year's crop. Over 900,000 tons are to be supplied. The Crimea is preparing for sowing winter grain. Seed is better quality than last year. (1530 GMT)

CSO: 1824/692

## MAJOR CROP PROGRESS AND WEATHER REPORTING

MOSCOW TV: WRITER DEPLORES HARVEST WASTE, LOSSES

LD302036 Moscow Television Service in Russian 1430 GMT 30 Aug 84

[From the Vremya newscast; video talk by writer Yuriy Gribov]

[Text] Summer is coming to an end, but there is still a long way to go before half of the harvesting has been completed. Our country is huge and the remainder of grain crops, untouched potatoes, sugar beet, corn, cabbage and carrots still stand in some places. The weather often deteriorates at this time. It is more difficult to harvest and more difficult to struggle against losses. And oh, the losses to be seen on rural roads! How much we talk and write about them, and adopt decisions, but as yet we still can't get rid of them in full! Besides combiners, on threshing floors, along roads traveled by machines from the fields you will sometimes see spilt grain, trampled in the dirt, thrown down, forgotten! Here and there rotting spears of hay, which they did not succeed in gathering, stand orphan-like, as though calling for help. Fallen apples rot, tomatoes go bad. When you see this you yourself want to pick up everything or, to shout for help, to make a telephone call, to abuse someone, to beseech; be quick and gather all of this; hide it from human view, because abandoned goods have an adverse effect on the spirit, and particularly on spirits that are young and not yet firmly established. Indifference, being accustomed to disorder, manifests itself, so that losses, problems connected with thriftiness, fall into not just an economic but also a moral category.

Leonid Mikhaylovich Malkov, hero of socialist labor, chairman of a kolkhoz in Kostroma Oblast, told me when I met him: For a good master nothing is wasted; he starts with himself, with the people, with education. The matter ought to be such that all, great and small, should not give respect for the common cause. Thriftiness ought to reside in the heart itself, from childhood, from youth.

CSO: 1824/692



## LIVESTOCK

### EIGHT-MONTH STOCKRAISING FIGURES PUBLISHED

PM210816 Moscow EKONOMICHESKAYA GAZETA in Russian No 38, Sep 84 (signed to press 10 Sep 84) p 12

[Unattributed "Statistical Summary": "Stockraising on Kolkhozes and Sovkhozes"]

[Text] The editorial office has received figures from the USSR Central Statistical Administration on the state of stockraising on kolkhozes and sovkhozes for January through August 1984.

The farms of the majority of the country's regions are successfully fulfilling production plans and the state's targets for the sale of meat, milk and other products from the stockraising units. The collective contract has been widely disseminated on many farms, particularly for fattening cattle and hogs and also in poultry raising. The new form of organizing and paying labor promotes the growth of the production of output and the reduction of its prime cost.

#### I. Production of Stockraising Output

In January-August this year the country's kolkhozes and sovkhozes had the following results in the production of stockraising products:

<u>Indicators</u>	<u>January-August 1984</u>	<u>January-August 1984 as percentage of January-August 1983</u>
Meat production (sale of livestock and poultry for slaughter in live weight), thousand metric tons	11,137	108
of which: Cattle	6,228	106
Hogs	2,908	112
Sheep and goats	559	105
Poultry	1,442	106
Gross milk yield--thousand metric tons	50,116	101
Average milk yield per cow--kilograms	1,768	101

[continued]

<u>Indicators</u>	<u>January-August 1984</u>	<u>January-August 1984 as percentage of January-August 1983</u>
Eggs--millions	35,606	103
Average egg yield of laying hens-- number of eggs	144	100.7

Compared with the same period last year meat production on kolkhozes and sovkhozes increased by 791,000 metric tons. Production of this output increased on the farms of all the union republics except the Uzbek SSR. In the RSFSR the greatest increase in meat production was secured on the farms of Ulyanovsk, Penza, Tambov and Kamchatka Oblasts, the Mordavian, Mary and Chuvash Autonomous Republics, and a number of other regions.

The gross milk yield over the first 8 months of this year was 726,000 metric tons more than in January through August last year. The greatest increase in its production was insured by the stockraising units of Latvia, Moldavia, Kirghizia, Belorussia, Azerbaijan and Lithuania. In the RSFSR the greatest increase in milk production was achieved by the kolkhozes and sovkhozes of Vladimir, Ivanovo, Gorkiy, Kubyshev and Perm Oblasts, Krasnodar Kray, The Udmurt, Dagestan and Karelian ASSR's and several other regions.

Egg production on kolkhozes and sovkhozes in January through August 1984 increased by 1.03 billion eggs compared with the same period last year. The great increase in egg production was achieved by the farms of Moldavia, Latvia, Kirghizia, Kazakhstan, Tajikistan and Azerbaijan. In the RSFSR the greatest increase in egg production was achieved by the kolkhozes and sovkhozes of Astrakhan, Penza, Smolensk, Vladimir, Bryansk, Orel and Rostov Oblasts, Stavropol Kray, and a number of other regions.

## II. Purchases of Stockraising Products on Kolkhozes, Sovkhozes, and Other State Farms

<u>Types of output purchased</u>	<u>Purchased in January-August 1984</u>	<u>January-August 1984 as percentage of January-August 1983</u>
Livestock and poultry (in live weight)-- thousand metric tons	10,952	108
Milk--thousand metric tons	47,543	105
Eggs--millions	34,234	103

[PM210817] The volume of sales of livestock and poultry to the state by kolkhozes, sovkhoses and other state farms increased by 810,000 metric tons over the first 8 months of 1984 by comparison with the same period last year. The farms of all the union republics except the Uzbek SSR increased the sale of livestock and poultry. In the RSFSR livestock and poultry procurements increased substantially on the farms of Belgorod Oblast, the Chuvash ASSR, Tambov, Penza, Kuybyshev, Vladimir, Gorkiy and Tula Oblasts, the Mordavian, Mary and North Osetian ASSR's Krasnodar Kray, Ivanova, Varonezh, Astrakhan, Saratov, Rostov, Perm and Orenburg Oblasts, and a number of other oblasts.

Purchases of milk and dairy products increased by 2,103,000 metric tons. Milk purchases increased most rapidly on the kolkhozes and sovkhoses of the Ukraine, Azerbaijan, Latvia, Belorussia and Lithuania. In the RSFSR the kolkhozes and sovkhoses of Kaliningrad, Kostroma, Kaluya, Orel, Gorkiy, Novgorod, Ivanova, Moscow, Leningrad, Pskov, Vladimir and Tula Oblasts, Krasnodar and Altay Krays, and Novosibirsk, Irkutsk, and a number of other oblasts increased the sale of this product.

The sale of eggs to the state in January through August 1984 increased by 886 million compared with the same period last year. The farms of Kirghizia, Tajikistan, Azerbaijan, Latvia and Armenia are in the lead in terms of the rate of increase of egg purchases. In the RSFSR egg purchases increased substantially on the farms of Astrakhan Oblast, the Udmurt ASSR, Tyumen and Murmansk Oblasts, the Tatar ASSR, Arkhangelsk and Leningrad Oblast, Altay Kray, and Bryansk, Smolensk, Rostov, Kurgan, Orenburg, Chelyabinsk and other oblasts.

### III. Production and Purchases of Stockraising and Products by Union Republic

	January-August 1984 as percentage of January-August 1983					
	Production			Purchases		
	Meat	Milk	Eggs	Livestock and poultry	Milk	Eggs
USSR	108	101	103	108	105	103
RSFSR	107	99.8	103	107	102	103
Including Nonchernozem Zone	107	102	102	108	104	103
Ukrainian USSR	108	103	102	107	110	102
Belorussian SSR	112	105	102	114	109	100.8
Uzbek SSR	96	91	100	95	96	99.7
Kazakh SSR	104	101	108	104	104	103
Georgian SSR	106	100.3	104	107	100.7	95
Azerbaijan SSR	108	105	108	108	110	108
Lithuanian SSR	119	105	105	118	109	104
Moldavian SSR	110	107	109	111	107	106
Latvian SSR	114	108	109	113	110	107
Kirghiz SSR	112	107	109	117	106	110
Tajik	103	103	108	103	104	109
Armenian SSR	107	99.98	105	107	100.6	107
Turkmen SSR	106	99.2	105	105	102	105
Estonian SSR	115	104	102	115	105	100.8

[PM210818] In addition, procurement organizations purchased 595,000 metric tons of milk and 33,000 metric tons of livestock from the population's private plots.

#### IV. Livestock Population

As of 1 September 1984 there were 97 million head of cattle on kolkhozes and sovkhoses, which is 1.9 million more than the same date last year. The number of cows reached 29.8 million. The hog population was 62.6 million, showing an increase of 0.8 million. There were 132.4 million sheep and goats. Poultry numbers totaled 774.7 million, showing an increase of 10.5 million. The cattle population increased on the kolkhozes and sovkhoses of all the union republics except Estonia. The hog population increased on the kolkhozes and sovkhoses of the majority of union republics except for the farms of Belorussia, Lithuania and Estonia. The numbers of sheep and goats increased on the farms of the Ukraine, Belorussia, Lithuania, Moldavia, Kirghizia, Tajikistan and Estonia. The number of poultry increased on the farms of all the union republics except Latvia, Armenia and Estonia.

The pastured period for livestock is coming to an end. The leading farms, having skillfully organized the green feed production process, are providing animals with full supplies of feed and seeking their high productivity, actively procuring feed, and preparing the stockraising units for wintering. It is essential to launch competition more widely among unit collectives for the best indicators. The introduction of the experience of the leaders is an important reserve for raising stockraising efficiency.

CSO: 1824/007

## LIVESTOCK

### PREPARATIONS FOR CATTLE WINTERING IN RSFSR DISCUSSED

Moscow SEL'SKOYE KHOZYAYSTVO in Russian No 8, Aug 84 pp 2-3

[Article by Yu. Gorbunov, chief of the Main Administration for Animal Husbandry of the RSFSR Ministry of Agriculture: "Completing the Pasture Season"]

[Text] The wintering of the cattle -- an important period for the livestock breeders. But an equally important period is that devoted to converting the cattle over from pasture maintenance to indoor maintenance. The successful wintering of the cattle is dependent upon how well organized this conversion is from the standpoint of time.

The experience of recent years has shown that it is precisely towards the end of the pasture maintenance period that reductions are noted in the weight increases and milk yields, with several months being required to compensate for these reductions. Many specialists offer as an explanation for this the commencement of the period of mass steaming up in cows. Perhaps this is so. But there is also another cause -- the untimely converting of the cattle over to indoor maintenance, insufficient feeding of the animals and disruptions in the daily routine. All of these shortcomings can be observed annually at kolkhozes and sovkhoses in Pskov, Orel, Ryazan, Yaroslavl, Kursk, Lipetsk, Penza and Saratov oblasts and also in the Mordovian ASSR.

Last year, for example, the proportion of cows in heat here remained at the same level (August -- 5-9 and in October -- 4-12 percent and the average daily milk yields during the second half of October decreased by 4-5 kilograms compared to the first half of August. The milk purchases during this period fell by more than one half.

In order to correct the situation, the entire herd must be converted over to indoor maintenance in a timely manner. In the process, consideration should be given to the weather conditions and to the condition of the grass stands out on the pastures, the full-value feeding of the animals should be organized and one false saving in the use of feed should be eliminated -- the practice of holding the cattle up until the last possible moment on scanty autumn grazing lands. At the same time, after changing the animals over to indoor maintenance and having organized their feeding based upon a complete winter ration, use should be made of the good days for grazing the cattle for 2-3 hours out on the pastures. The animals profit greatly from such handling.

The conversion of cattle over from pasture to indoor maintenance has been organized well at the Bugry and Krasnyy Oktyabr' sovkhozes in Leningrad Oblast. Here work was carried out in advance in connection with repairing the cattle yards, heating them and installing equipment in them. Thus, with regard to last year's wintering period, the animals had been placed in stalls and the feed preparation shops placed in operation prior to 20 September. The feed was issued in accordance with the winter rations and in the form of full-value feed mixtures. And no sharp reduction took place in the productivity of the cattle. In October the daily milk yield per cow at the Krasnyy Oktyabr' Sovkhoz had decreased by only 300 grams compared to August. In October, 441 kilograms of milk were obtained here per forage cow (40 kilograms more than the figure for 1982). In 1983 the milkmaids at the Bugry Sovkhoz obtained 4,000 kilograms of milk from each cow (471 more kilograms than in 1982). The annual milk yield per cow at the Krasnyy Oktyabr' Sovkhoz was 5,305 kilograms (37 kilograms more). Similar results are being obtained on many farms as a result of concern being displayed for the productivity of the herd during the autumn and subsequent months.

Unfortunately, the leaders and specialists on a number of farms fail to devote any attention to preparing their farms for the wintering operations or to repairing the equipment and mechanisms until September has arrived and naturally by this time it is impossible to complete all of the preparatory work prior to the commencement of the indoor maintenance period. And indeed the cattle should ideally be placed in their stalls not later than 1 October.

Good quality and warm wintering operations commence with the procurement of feed. The feed procurement brigades are confronted with the task of observing the silage procurement technology in a very strict manner. This also holds true for haylage. At the present time, this work is nearing completion. Nevertheless, it must not be forgotten that the temperature regime for the bulk must be observed during the silage laying in period, since in the final analysis it is this regime which determines the nutritional value and digestibility of the prepared feed. The optimum temperature is considered to be 35-38 degrees. This means that in order to obtain an equal amount of milk or live weight in the animals, it will be necessary to expend four times more strongly overheated silage (up to 60-70 degrees) than silage which is held at the optimum temperature. In order to prevent the thermal processes from taking place, the trenches of any capacity must be filled within a maximum of 3-4 days, no more.

In the north Caucasus, central chernozem and Volga regions, corn with ears in the milk-waxy ripeness phase is harvested for silage. This increases the nutritional value of the prepared feed by almost twofold compared to that which is prepared from corn which lacks ears. In order to raise the quality of corn silage, dry components are added to it. This is required in particular when the bulk has a moisture content of 85-90 percent. Science has proven that the addition to corn of 10-15 percent chopped straw or 20-30 percent oats plant bulk during the phase of waxy grain ripeness lowers the moisture content to 74-75 percent. Here the silage yield is increased from 60 to 87 percent and the nutrient losses are lowered from 26 to 11-16 percent.

In economizing in the use of concentrated feed, a considerable role is played by the preparation of mixed silage, the nutritional value of which is

considerably higher than the nutritional value of conventional silage. This will be especially important during the forthcoming wintering campaign, since limitations will be placed upon the feeding of concentrated feed to the cattle (and to the principal consumer of concentrated feed -- hogs). Not less than 5-6 tons of mixed silage must be procured per sow.

The thrifty consumption of forage is greatly dependent upon its quality. At the present time, inter-farm and intra-farm express laboratories have been organized in a number of oblasts for the purpose of evaluating the content of dry substance and carotene during the feed procurement period. Such laboratories will aid the livestock breeders in evaluating the quality of the feed in an accurate and efficient manner. The agrochemical laboratories must participate in this work. They must carry out a complete analysis of the feed prior to the commencement of the indoor maintenance period.

Nor does the problem end with the procurement of high quality feed. Importance is also attached to preserving the nutrients in the feed throughout the entire winter-indoor maintenance period. Coarse feeds must be stored under sheds, in grain storehouses and on platforms in large ricks that are covered with plastic or straw. This lowers the natural losses which occur during storage from 10-12 to 2.5-4 percent.

The livestock wintering period must be characterized not only by ample feeding but also by warmth. The barnyards, pigsties and sheppens must be prepared in a timely manner, the floors and windows heated, doors and gates must be fixed so as to eliminate drafts, a check must be carried out on the ventilation system and a fine microclimate must be created in the facilities -- this will aid in protecting the animals against cold infections, in raising their productivity and, a point which is of special importance, it will aid in achieving feed economies. On farms which are engaging in the winter fattening of young cattle stock at sites, simple wind-proof barns with deep bedding should be built, the sheds should be heated, feed brought in, heated group watering bowls installed and pasture enclosures should be built for protecting the animals against cold winds. The small additional expenditures required for carrying this work out will be returned one hundred fold.

It is useful to remember that well prepared and heated facilities will in the final analysis require fewer expenditures for fuel and electric power.

It is known that feed prepared in a feed preparation shop is consumed more willingly and assimilated better by the animals. Unfortunately, proper attention is not being given in all areas to preparing the feed for distributing to the animals. In Kaluga, Kostroma, Smolensk, Tula and Novosibirsk oblasts and also in the Dagestan ASSR, feed preparation shops are to be found on only two thirds of the farms and in Kemerovo Oblast, the Checheno-Ingush ASSR and Krasnoyarsk Kray -- on one half. The production of feed mixtures is organized poorly at kolkhozes and sovkhoses in Vologda, Pskov, Kostroma, Smolensk, Yaroslavl and Perm oblasts, the Dagestan ASSR and in Khabarovsk Kray.

There have been instances of the feed being handled in a careless manner during the winter-indoor maintenance period: food not eaten by the cattle is being thrown away. At the present time, a waste-free technology for the use of forage must be introduced into operations in all areas. Three years ago this work was

initiated by farms in Tetyushskiy Rayon in the Tatar ASSR. Here they gathered up the feed waste scraps, they were passed through the feed preparation shop, mixed with high quality feeds and thereafter once again delivered to the animals. This brought about a noticeable increase in the production of milk and meat.

As is known, the expenditure of concentrates does not always increase the productivity of the animals, since these feeds are utilized in an inefficient manner. Quite often the animals are supplied with one type of grain crop (barley, corn, wheat waste scraps and so forth, separately). Meanwhile, an animal assimilates only 20 percent of the nitrogen found in wheat. From a mixture of two or more components -- up to 28 percent. And if mineral-vitamin premixes or grass meal are added to the mixture, the assimilation of nitrogen reaches 40 percent. Hence it is possible to reduce the consumption of concentrates by twofold merely through the preparation of multiple component grain mixtures, with the ration being balanced in terms of the principal nutrient -- protein.

The conversion of cattle over to the wintering program raises many concerns among the veterinary workers. Clinical examinations of the animals, planned vaccinations and prophylactic treatments and singling out those animals which are of no economic value -- all of these actions require fixed attention. Prior to the commencement of the indoor maintenance period, the veterinary services must carry out a complete system of measures aimed at singling out and treating weak and sick animals and organizing sanitary-treatment and prophylactic stations. As a rule, the farms which do not have such stations turn over a large portion of their cattle in a lower than average state of nourishment and thus they suffer losses.

Animal husbandry is a common concern. At the present time, a great deal depends upon the work being carried out not only by the agricultural workers but also by their partners in the agroindustrial complex. The experience of the past wintering campaign revealed that a considerable portion of the feed preparation shops were idle owing to shortages in spare parts and fuel. Here primary responsibility rests with the subunits of RSFSR Goskomsel'khoztekhnika, which are responsible for raising the quality of the repair work carried out on equipment and mechanisms, carrying out their contractual obligations for servicing the farms in a more efficient manner and, finally, organizing a guaranteed supply of spare parts, units, equipment and repair materials. The associations of Rossel'khozkhimiya must also create adequate supplies of mineral feeds, feed additives and chemical reagents for the farms prior to the commencement of the indoor maintenance period.

Recently the complexes and large farms have been making greater use of the flow-line departmental system for milk production and reproduction of the herd. Experience has shown that this system makes it possible to increase milk production and the yield of offspring and it is also promoting the introduction of the collective contract into use in dairy cattle husbandry.

For 5 years now the farm workers at the Kamenskiy Sovkhoz in Sverdlov Oblast have been employing the flow-line departmental system for milk production. In 1983, Brigade No. 2 at the Pozarikhinskaya Farm, which services 550 cows,



converted over to a double shift work regime. The introduction of the flow-line departmental system has made it possible to establish the norms for labor in a very strict manner and to feed the animals on a differentiated basis. Special attention is being given here to increasing the milk yields of first heifers. Thus in the department for increasing milk yields, the workload per milkmaid does not exceed 28 cows (the average workload in the brigade -- 36). This is making it possible to devote greater attention to each animal. Here the calf yield per 100 cows is approximately 100 head.

In 1982 the brigade converted over to the use of a collective contract. Compared to 1981, milk production in 1983 increased by 24 percent. Moreover, the labor expenditures per quintal of milk fell from 4.1 to 3.6 manhours, feed consumption from 1.25 to 1.11 quintals of feed units and, as a result, the production cost per quintal of milk decreased by 5 rubles. The annual milk yield per cow reached 4,356 kilograms.

At the present time, progressive forms for labor organization and wages are being introduced into operations on farms in Russia, with one such form being the collective contract. In the Altay Kray, there are 2,800 livestock brigades and teams (more than 13,000 persons) working on the basis of a collective contract today.

The operational experience of Farm No. 1 at the Kolkhoz imeni XXII Parts'yeyda in Slavgorodskiy Rayon is deserving of fixed attention. In addition to the introduction of the collective contract, the livestock breeders here were converted over to double shift operations. The milkmaids and cattle tenders have been combined into teams, with their earnings being entirely dependent upon the final results. The rates for the remaining categories of workers (brigade leader, accounting clerk, fitters, manual workers) are computed for the output by professions, in conformity with the wage rates and 25 percent additional payment for the output. The awarding of bonuses was established on the basis of 1 percent of earnings for each percent of over-fulfillment of the production plan. The point system for evaluating work participation is employed for issuing bonuses on the farm. Once a month the operational results are discussed by the brigade council and the status of labor and technological discipline is examined. All of this has made it possible to increase the production of goods and to lower labor expenditures.

Last year, 3,578 kilograms of milk were obtained from each cow (638 more kilograms than in 1982). Feed consumption per unit of output decreased and amounted to 1.07 quintals of feed units. Labor expenditures for the production of a quintal of milk decreased from 4.41 to 3.82 manhours.

Beyond any doubt, successful farm work is achieved by the farm personnel, whose needs must be an object of priority concern. Services for the livestock breeders are well organized at the Povadinskiy Sovkhoz in Moscow Oblast. A medical dispensary is in operation at the Shelgyat'yevskiy Dairy Complex of this farm and a mobile shop calls upon the farms in accordance with a schedule agreed upon in advance. The complex has a well equipped recreation and reading room where one can always find current newspapers and journals. This experience is deserving of dissemination on an extensive scale.

The impending cattle wintering campaign is confronting the livestock breeders with complicated tasks. They are under an obligation to prepare for and successfully carry out these tasks in an organized manner.

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## AGRO-ECONOMICS AND ORGANIZATION

### FOLLOW-UP COMMENTARY ON GEORGIAN AGRICULTURAL RESTRUCTURING

Moscow IZVESTIYA in Russian 25 Jun 84 p 2

[Article by IZVESTIYA special correspondents V. Gavrichkin, O. Pavlov and T. Chanturiya, Georgian SSR: "Base of the Vertical." The item referred to in introductory paragraph appeared in IZVESTIYA 16 May 84 p 2 and was published in FBIS Soviet Union DAILY REPORT 29 May 84 p T 2]

[Text] "The Vertical," that was the title of the material published in IZVESTIYA (No. 136/137). It related the experience of improving management of agricultural production in the Georgian SSR, where an essentially new management system, the State Committee of Agricultural Production GSSR, was created, comprised of the former Ministries of Agriculture and Land Reclamation and the State Committee of Production Equipment for Agriculture, as well as Mezhholkhozstroy [Inter-Kolkhoz Construction Organization] and the Trans-Caucasus Branch of VASKhNIL [All-Union Order of Lenin Academy of Agricultural Sciences imeni V. I. Lenin.] A vertical management system was established, unifying the primary elements of the agro-industrial complex of the republic. And RAPO became the foundation, the firm basis for this vertical structure.

THE MAIN POINT. To say it at once: RAPO in Georgia were born twice.

But not everyone will probably recall that for many years the Abasha region was considered one of the most backward. Even the corn, which should grow here like nothing else, yielded poorly: they say that not every year the Abasha residents had enough of their own corn flour for the traditional mchadi flat cakes to reach from one harvest to the next. The breaking point came at the end of 1974, when a production agricultural association was organized at the initiative of G. Mgeladze, who headed the local party raykom at the time. Three years later the Abasha rayon produced 1.5 times as much corn and meat as before, 3 times more vegetables and one-third more milk.

A fundamental conclusion was reached from the Abasha experience: specialization of production in no way presupposes specialization of management. On the contrary, agricultural production must be specialized, but management must be of a composite nature.

The elimination of three departments and establishment of the State Committee of Agricultural Production on their basis is a direct realization of this idea. The vital needs of RAPO led to the appearance of the State committee. In turn, it caused the restructuring of the rayon agro-industrial associations: itself integrating management on a republic level, and giving full authority into the hands of RAPO councils. In other words, RAPO were born twice.

IMPRESSIONS, OBSERVATIONS, MEETINGS... Goriyskiy Rayon, or, as these places are still called, Kartli, is the heart of Georgia. The road to Gori is like an orchard lane. The horticulturists of the rayon supply 133,000 tons of produce, one quarter of the republic output. The grain tracts are sufficiently large, vegetables are grown, dairy and meat livestock and poultry raising are developing.

"What has RAPO given us?" repeats V. Abramishvili, party raykom first secretary. "Compare: in 1980 we harvested an average of 55 quintals of fruit per hectare, 58 the next year, 61 the following year, and 76 last year. An object lesson."

At first in Goriyskiy Rayon, just as elsewhere, Rayselkhoztekhnika [rayon agricultural equipment association], let us say, was part of the agro-industrial association, and its chairman was the deputy chairman of RAPO. But even within the framework of the now united department, this did not change things for the better. As before, he did not visit the farms, and the needs of kolkhozes and sovkhoses were of little concern to him. Personal traits are not at all at fault here. The system of interrelations was guilty, stimulating concern only for the sector, the intermediate indicators, not the final ones. There was a need to change such a system. And this was done.

Taking into account specific zonal and regional conditions, output volume and outlook for development, five structures of the management apparatus of RAPO were worked out. The Goriyskiy structure is one of the five basic ones. In addition to the RAPO council, which meets once a month, a management board was formed, accountable to the council. The council chairman had five deputies who are responsible for the operation of specific functional departments.

First deputy chairman of the RAPO council G. Abalaki is in charge of the departments of equipment operation and repair, transport and hauling, construction, and the group for land reclamation, mechanization and electrification of livestock raising.

"Essentially we no longer have rayselkhoztekhnika," relates Givi Georgiyevich. "We have an enterprise for the repair and operation of the machine and tractor fleet, with maintenance stations attached to it. The overall management is in the hands of the department of RAPO, whose interests are directly linked to the condition of equipment in the kolkhozes and sovkhoses. The repair enterprise works with them on direct contracts. If a tractor runs well for the period guaranteed by the repair workers, and maintenance is performed on schedule, you receive an additional bonus from the farm enterprise. And no intermediary indicators at all. There is only one criterion, and that is the readiness of the equipment."

The same basis is being used to structure the relations between kolkhozes and sovkhozes and enterprises engaged in using chemical methods and those dealing with land reclamation. Their principle is: no extra links of any kind, the interrelations between all participants in the production process are on a cost accounting basis--according to the contribution to the achievement of the end result. For example, the contribution of agrochemists and land reclamation workers is not determined in hectares or cubic meters of soil turned. You turn an improved field over to a farm enterprise--issue a certificate guaranteeing high productivity here...

"Formerly our concern was to deliver water to the kolkhoz or sovkhoz boundary," explains M. Arindauli, chief of the land reclamation and water resources administration of Telavskiy Rayon. "Now we have placed pumping stations and irrigation equipment on our balance sheet and do the watering ourselves. There are more things to bother with, but more interest too: the enterprise pays us a bonus depending on the harvest."

We were standing on a steep bluff. Below us were the tiled roofs of Telavi, the center of a major viticultural region, and farther, squeezed between the mountains, lay the Alazan Valley. Signs of a recent flood were still visible along the riverbanks.

"How much we would have to bother around here by ourselves," said M. Arindauli. "But now the whole rayon has come to help..."

FROM INFORMATION obtained from the State committee of the republic. "Last year 75,000 hectares of plantings, 37,000 of vineyards and 15,000 hectares of orchards were destroyed here by frost, heavy rains and hail. Agriculture suffered losses."

But the land has one owner now. Everything that could be saved, preserved and produced, was produced. Profits from agricultural production were in the sum of about 210 million rubles compared with 122 million last year, and the number of unprofitable enterprises was reduced from 382 to 75.

In that same Telavskiy Rayon 2,250 hectares of vineyards alone were destroyed. RAPO mustered all its efforts to restore them and additional resources were allocated from the central fund. For example, the sovkhoz Kisiskhevi received 40,000 rubles, Tsinandal'skiy sovkhoz--12,000. Long-range issues are also resolved more easily now.

But the real pride of the Telavskiy RAPO is the Rtveli automated control system. At first the automated system was contemplated only to make management of the grape harvest easier. The calculations proved correct. The specialists continued their research. And now, processing a large volume of data by computer, they gained the possibility to exert a precise and effective influence on the production process.

Cooperation with nature is perhaps the most remarkable aspect in the work of the APK [agro-industrial complex] of Georgia. In Gardabanskiy Rayon, where the first model of the interrelations of production with scientific institutions

began to be developed, they most likely did not even surmise what repercussions this undertaking would have. It is impossible for us to even list everything new that has become available to the enterprises and works for the harvest and increased farm productivity. We will say the main thing: a system for the introduction of the achievements of science into production has been installed in Gardabani, beginning with the inclusion of one development or another into the production and financial plan of enterprises, allocation of funds, calculation of the real economic gain, and up to material incentives for establishments and specialists.

Following the experience of Gardabani, departments of introduction [of science] have been established in every RAPO, and became the main element in the implementation of the extensive "Science for production" program. The real opportunities for realization of new and advanced practices in economic operations turned out to be so great that many scientists whose work often gathered dust on the shelves for years, went to work in the farm enterprises and became heads of APK departments of introduction. And in general, the drain of specialists from republic departments to the APK and to enterprises is already becoming a phenomenon. Of course, material incentives played a certain role: the State committee exercised its rights and pays such specialists the same salary that they had received at their former place of work. But the main thing lies in the prestige of the matter.

In the RAPO and at the enterprises we met tens of managers and specialists who think modern, who are goal-oriented and enviably enterprising. And we often asked: "Where had these people been before?" "They were right here," was the standard answer. A cause and the opportunity of pursuing it creatively--this is the most important thing that people gained together with improvement of management and the economic mechanism.

Not to understand this is bad, but even worse not to feel how difficult it is for the links of the new mechanism to adjust themselves. As we see, much has been done, but there is more ahead. The experiment is continuing, and raising its own problems.

LET US RUMINATE TOGETHER. A decision was made in the republic to hear the question of the style of managing agricultural production in the new conditions, using the example of one of the Soviets. And they had to reject this; no such style had yet been developed, the old pattern was still alive, the attempts to dictate, to deal in trivialities.

"Productivity is being 'handed down' to us as before: 70 quintals per hectare for the kolkhozes, and 90 for sovkhoses," related Z. Kituashvili, director of the Tsinandal'skiy viticulture sovkhos. "And what is the difference between a kolkhoz and a sovkhos? Moreover, we have valuable varieties. Saperavi, for example, never produces 90 quintals. If you calculate its realistic crop capacity, then for 'rkatsiteli' the gross yield would have to be 120 quintals, which is impossible."

And what about the formation of centralized RAPO funds? So far they are formed here by deducting 10-15 percent from the corresponding funds of enterprises.

Whoever works more profitably, pays more. So is "punishment" for initiative to be continued? In Estonia, let's say, they do things differently: the so-called resource potential is derived for each farm taking into account the soil productivity index and availability of resources and manpower. The deduction into the RAPO fund is then calculated from this index. And if someone performed better, received more, then the additional funds are left to the enterprise as incentive for being enterprising. That is truly a fairness coefficient! Why not adopt it?

We have already said that the integration of three departments united the interests of agricultural production and the sectors servicing it. But there are other partners left: the processing enterprises, procurement and other organizations of the so-called double subordination type. They are members of RAPO, but also have a direct master above themselves, who tries to avoid turning funds for resources over to the APK, and to permit no interference.

Let us say there is the Gulgula sovkhos in Telavi, directly subordinate to the Union Semprom [Seed-raising Industry]. It grows dill and cucumber seeds on land which could support saperavi grapes. RAPO could take charge of the land with benefits to both sides, but the Union department does not want to do it.

Or the partnership with the Ministry of the Fruit and Vegetable Industry, which did not join the State committee. Fruit and vegetable farms are found in only four rayons of the republic. But on the whole, up to 80 percent of the output produced in these rayons are products of livestock raising. For this reason the APK here are subordinate to the State committee. And what about the funds? Should the Ministry of the Fruit and Vegetable Industry turn them over to its enterprises directly or through RAPO? And what about the right of RAPO to monitor the operations of fruit and vegetable farms?

These are not new problems. The APK encounter them in any region of the country. Maybe someone will say: so in Georgia too they cannot handle these problems.

In our view, the Georgian experiment is not the point here. This phenomenon has other roots. Having been born, RAPO inevitably not only breaks previous forms of economic operations, but also tests all partners for economic maturity and the ability to exhibit statesmanship in thinking.

VIEWPOINT. We were told in the republic that no one is able to see the state of affairs at one's own enterprises better than they know it locally. Therefore it is time that the ministries and departments understood that RAPO is their best territorial helper in pursuing sector policy. And if we want to have a genuinely authoritative management organ in the rayons which would be fully accountable for the state of affairs, then it is necessary to give RAPO the right to concentrate and distribute material and technical resources of all enterprises and organizations making up the association. What harm would there be, let us say, if the RAPO distributes the funds allocated by the Ministry of the Fruit and Vegetable Industry or the Gruzptitseprom [USSR Poultry Industry] to their enterprises and poultry farms? The funds would not leave the sector, but their optimum use would be guaranteed. The APK, as the single

holder of funds, would free its partner from the necessity to "get by force" what had been promised and deliver funds to their destination. In other words, it would become the highest authority for the economic managers.

At the same time its decisions on economic issues, within the limits of the rights granted, of course, must be the law for all partners. Would it be bad if the ministries and departments of the APK charged RAPO with working out specific programs for development of one sector or another in the rayon? In addition to mutual responsibility, such cooperation would ensure validity, and therefore viability, of the program itself. And the centralized funds of RAPO are a solid support for the development of the entire agro-industrial complex of the rayon. Unfortunately, so far this money, and impressive funds at that, are not augmented with material and technical resources.

As we see, there are many questions. To resolve them would mean to ensure the authority of RAPO by deeds.

RAPO is the first brick in the foundation of the management vertical structure. Under it and with it is the horizontal: all elements of production, service, procurement and processing of the output. The coupling of these links into a single chain is not proceeding easily. It must be sufficiently strong to withstand the load of responsibility for the implementation of the Food Program. And this is not a task for RAPO alone, it is the direct duty of all ministries and departments of the agro-industrial complex.

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## LAND RECLAMATION AND WATER RESOURCES

### RSFSR LAND IMPROVEMENT PROGRESS REPORTED

Moscow SOVETSKAYA ROSSIYA in Russian 27 Jun 84 p 1

[Unsigned article: "The Potential of Land Improvement"]

[Text] Land renewal. Today these words have an accustomed sound, although we began to develop genuinely widespread land improvement about two decades ago, after the May (1966) Plenum of the CPSU Central Committee. Much has been accomplished since that time. Extensive production equipment facilities have been built, experience accumulated, new technology assimilated, and stable collectives have been formed. Land improvement has become an important branch of the agro-industrial complex. Its potential now permits accomplishment of large-scale projects. During the last three five-year plans and three years of the current one the State alone allocated 35 billion rubles for construction of water management facilities, development of irrigated and drained lands and growth of the facilities of land improvement organizations in Russia. The area of reclaimed lands in the republic has tripled and now comprises 10 million hectares. Large irrigation systems have been built in the Volga region and in North Caucasus, land renewal proceeds at a faster pace on the non-chernozem zone, Siberia and in the Far East.

Possibilities have opened up to grow significantly more vegetables, feed, corn for grain, melons and other crops with irrigation. All the rice is grown on reclaimed land, with the output increased to 1.2 million tons, i.e., more than doubled. Occupying 4.5 percent of all agricultural lands, reclaimed fields and meadows produce about 15 percent of the plant growing output.

In a word, land reclamation is one of the most important elements of the long-term program for the intensification of agriculture, permits significantly increased productivity of millions of hectares of land and a more efficient use of equipment and fertilizers, and creates the conditions for obtaining guaranteed and high harvests. And it is very important to utilize the created potential and accumulated experience, develop on its basis progressive forms and methods of organizing the work, and strive for their high effectiveness.

Party committees and economic organs of Astrakhan Oblast, where irrigated fields now occupy half of all arable lands, are skillfully analyzing and generalizing the experience of growing vegetables and melon crops with irrigation. Primary attention here is devoted to the comprehensive utilization of these

lands. By virtue of strengthening the relations of the kolkhozes and sovkhoses with scientific institutions, the Astrakhan industrial technology for growing vegetable and melon crops was born. It is recommended for wide application. As experience has shown, this technology can be successfully used for growing an entire series of intertilled crops.

Useful experience can be found in every oblast, autonomous republic and kray where land renewal is practiced. In the arid steppes of Stavropol and Kulunda, in the wet and marshy soil of the non-chernozem zone, in many so-called regions of risky agriculture guaranteed harvests are now being obtained, and their stability and growth are ensured.

Still, every time the subject of the effectiveness of land reclamation is discussed, either in a small group of specialists or at large conferences, more criticism and serious disapproval is expressed. And justifiably so. After all, the high achievements of many collectives are graphic evidence of the enormous potential opportunities in land improvement. However, if these are compared with the overall results that have been attained, with the return from the funds invested in irrigation and drainage, and the results compared with the large objectives determined by the Food Program, then it becomes evident how much still remains to be done to increase the effectiveness of land reclamation.

Shortcomings are felt in many elements of the sector, beginning with designing irrigation and drainage systems, and ending with their maintenance and operation. The greatest problem, however, is the piecemeal development of reclaimed lands and lagging behind in agricultural improvements. Drained lands are often placed under crops without first taking comprehensive measures to increase soil fertility. Hundreds of thousands of hectares annually receive incomplete doses of fertilizers, especially organic ones. And this means that the efforts of some land improvement organizations are performed essentially in vain. So there is no point in expecting high productivity on such fields.

Investigations carried out by specialists and scientists show that while investing large funds, many kolkhozes and sovkhoses fail to show proper concern for increasing the fertility of irrigated and drained agricultural lands, doing poor work with the soil. Out of 1,800 hectares at the Gorets sovkhos in the Chechen-Ingush ASSR, more than 1,000 were not irrigated last year. The harvest obtained here was half of the plan. Measures have been taken this year, the situation is improving, but far from all shortcomings have yet been eliminated.

In the Chuvash ASSR and in Tomsk Oblast reclaimed fields are receiving very little organic fertilizer; in Krasnoyarsk Kray and Kaluga Oblast none of it at all was applied on drained lands in the last few years. At conferences and various sessions here the great importance of land improvement is usually emphasized, but why its effectiveness is low--this is not yet well-understood everywhere. And so, no one is seriously and specifically taken to task for the shortcomings. It seems that workers in the ministries of agriculture and fruit and vegetable industry are not always demanding. How can it be tolerated that from year to year, hundreds of thousands of irrigated lands are not watered

at all, that no specialized crop rotation systems are introduced, the complex of agricultural land improvement measures not maintained, and that scientifically substantiated farming systems are not introduced.

Such instances can remain unnoticed in sector headquarters only if their monitoring measures are relaxed and there is insufficient effectiveness in the management of key issues, and when stagnation occurs. The February and April (1984) Plenums of the CPSU Central Committee clearly and precisely determined the ways to overcome such shortcomings.

The use of intensive methods of economic operations presents many important and complex management problems. For this reason the slightest manifestation of stagnation and conservatism seriously affects the results. In recent years the RSFSR Ministry of Land Reclamation and Water Resources and many organizations of the Main Administration of Land Reclamation in the Nonchernozem Zone willingly undertook costly capital construction projects, which make a large gross input into the overall plan, but showed little interest in arable land, hayfields and pastures needing improvement, that is in industrial crop work which is less costly, but also is very necessary for the kolkhozes and sovkhozes. This was condoned in the departments, and as the result a considerable distortion in the structure of land reclamation work occurred in many rayons and enterprises.

The CPSU Central Committee Politburo recently approved the basic directions of the program for further development of land reclamation and increasing the effectiveness of its use. This program provides for a broad set of measures to considerably expand irrigated farming. Construction of large irrigation systems is planned, including in our republic: in the North Caucasus, the Volga region, Western Siberia, the Trans-Ural and the Nonchernozem zone. Special importance is attached to the return from the funds invested.

All this requires a more active and extensive use of the accumulated experience as well as the resolute elimination of shortcomings and a high sense of responsibility of all land improvement subdivisions for fulfillment of plans. Unfortunately many of them systematically fail to accomplish their tasks. Last year, for example, the RSFSR Ministry of Land Reclamation and Water Resources failed to ensure the fulfillment of the plan for 186 large construction projects out of 214. Only 55 percent of the fixed production assets of these projects have been placed in operation. In the three years of the five-year plan period the kolkhozes and sovkhozes were shorted by 150,000 hectares of irrigated and 204,000 hectares of drained lands, and crop preparation work was not done on 1 million hectares. The subdivisions of the Main Administration of Land Reclamation in the Nonchernozem Zone also allowed themselves to fall far behind in the delivery of improved agricultural lands.

It is completely obvious that a thorough analysis of the situation, a more exacting view of the results, and their self-critical evaluation are required of these departments. The point is not in individual, specific corrective measures, but in serious restructuring of land reclamation work, and significant improvement of design efforts and operation of the constructed systems. It is necessary to put things in such a way that in each collective they would know

what ways and means are planned for the attainment of new goals, and what the contribution will be to the national competition for exceeding the plan for increasing labor productivity by one percent and an additional reduction of work costs by one-half percent.

At some land reclamation organizations such ways have been determined. Measures have also been outlined to reduce the power and capital consumption of water management facilities. Using the experience already available in the republic, they are building irrigation systems using local runoff, reducing the amortization period; irrigating fields using underground water sources as is done in the Kulundinskaya steppe in the Altay region, and also expanding estuary irrigation. A large effect is obtained from reconstruction of old land improvement systems: at relatively small expense this rapidly restores the potential capacity of the renewed lands, ensures increased harvests and raises labor productivity.

Land reclamation, which has become part of the agro-industrial complex as a most important sector, makes it possible to attain goals of ever increasing scale. The Food Program now requires that it be raised to a qualitatively new level, more effectively using the opportunities for increasing stability of farming and for increasing agricultural output production.

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## LAND RECLAMATION AND WATER RESOURCES

### MEETING DISCUSSES LAND RECLAMATION PROGRAM

Moscow STROITEL'NAYA GAZETA in Russian 3 Jun 84 p 1

[Unsigned article: "Successful Start"]

[Text] The increasing role of land reclamation in the intensification of agricultural production was the subject of discussion at a ceremonial meeting devoted to a professional festive occasion--Day of Land Reclamation Workers. It took place on 1 June in Moscow.

USSR Minister of Land Reclamation and Water Resources N. F. Vasil'yev presented a report.

Participating in the work of the meeting were Deputy Chairman of the USSR Council of Ministers Z. N. Nuriyev, Chief of the Department of Agriculture and Food Industry of the CPSU Central Committee V. A. Karlov, and officials of the central ministries and departments.

On the eve of the festive day, at the request of STROITEL'NAYA GAZETA correspondent, First Deputy Minister of the USSR Ministry of Land Reclamation and Water Resources P. Polad-Zade told of the activities and plans of land reclamation workers.

It has become a good tradition on a professional festive day to summarize the results of work accomplished and to outline plans for the future.

Land reclamation is one of the most important factors in the intensification of agricultural production. I will recall that about 70 percent of the grain crops are planted in areas subject to drought. In the north-west and eastern regions of the country most farm land has excessive moisture. And yes, in any region of the country many fields need land improvement measures.

During the three years of the five-year plan period, about 2 million hectares of irrigated and over 2 million drained lands have been placed in service. Now the area of reclaimed agricultural lands has reached almost 33 million hectares. All the raw cotton and rice are produced on these lands, as well as three-fourths of the vegetables.

Important tasks are ahead for the land reclamation workers in the fourth year of the five-year plan. It must be noted that a good start was made from the beginning of the year. In five months the construction organizations of the USSR Ministry of Land Reclamation and Water Resources have successfully completed the planned volume of work.

If all land reclamation organizations attain an above-plan growth in labor productivity of one percent this year, it will permit an additional completion of construction and installation work in the amount of 64 million rubles. And an expenditure reduction of an additional one-half percent will permit a saving of tens of millions of rubles. This is equivalent to placing in service an additional 15,000 hectares of irrigated and 20,000 hectares of drained land.

Special attention is devoted to raising the effectiveness of using irrigated and drained lands. The CPSU Central Committee Politburo recently approved the basic directions for development of land reclamation, providing for a broad set of measures to significantly expand irrigated farming in the arid zone of the country. Construction of a number of large irrigation systems is planned in the North Caucasus, southern Ukraine, Moldavia and the Volga region. Construction of water management projects will be further expanded in the republics of Central Asia, in Kazakhstan, Western Siberia, the Trans-Ural region, the Russian Nonchernozem zone, Belorussia and the Baltic region. We are also facing large tasks in the improvement of social living conditions in rural areas.

As noted at the session of the CPSU Central Committee Politburo, especially important is the rational utilization and conservation of water resources and their redistribution in the interests of the national economy. This aspect of the work occupies an important place in the activities of land reclamation workers.

The construction of water conservation facilities, a shift to circulating and drainless systems being implemented in accordance with directions of the party and government, and strengthening control by the water inspection organs promoted the improvement in the sanitary conditions of the Volga, Dnieper, Desna, Kuban and a number of other rivers.

The accumulated experience, a firm production base and the existence of stable collectives of land reclamation workers make it possible to successfully attain increasingly complex and extensive goals in the development of the sector. Next in line is the implementation of major projects on redistribution of water resources. Much is also to be done on reconstruction of functioning land reclamation systems.

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## LAND RECLAMATION AND WATER RESOURCES

### CONFERENCE DISCUSSES TRANS-VOLGA IRRIGATION

Moscow SOVETSKAYA ROSSIYA in Russian 30 Jun 84 p 2

[Article by TASS correspondent: "Land Reclamation Potential"]

[Text] Saratov, 29 [Jun] The irrigated fields of Saratov Oblast have become a testing ground for science and wide introduction of advanced production practices. Not so much time has passed since the May (1966) CPSU Central Committee Plenum, when the campaign against drought began in the Trans-Volga steppes, but much has been done. The areas of reclaimed land have increased tenfold. The largest irrigated field in Russia is now here. Large systems for regular irrigation have been built on the Volga, a large production equipment base has been created, new watering techniques have been assimilated, and stable collectives formed.

This was discussed today at a conference of the Saratov Oblast party and economic aktiv, heads of party, soviet and agricultural organs, land reclamation workers, scientists and specialists, dealing with the problems of increasing the effectiveness of irrigated lands in the oblast.

Participating in the conference were Deputy Chairman of the USSR Council of Ministers, USSR Gosplan Chairman N. K. Baybakov, Deputy Chairman of the USSR Council of Ministers Z. N. Nuriyev, USSR Minister of Agriculture V. K. Mesyats, USSR Minister of Land Reclamation and Water Resources N. F. Vasil'yev, Chairman of the USSR State Committee for Supply of Production Equipment for Agriculture L. I. Khitrin, First Deputy Chairman of the RSFSR Council of Ministers L. B. Yerminev and executive officials of ministries.

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## LAND RECLAMATION AND WATER RESOURCES

### SEMINAR DISCUSSES STRONG WHEAT GROWING TECHNIQUES

Moscow SEL'SKAYA ZHIZN' in Russian 27 Jul 84 p 1

[Text] Lipetsk, 26 [Jul] (TASS) The intensive techniques being presently assimilated by the kolkhozes and sovkhoses of Lipetsk Oblast permit a doubling of the productivity of winter fields and simultaneously a significant improvement in the bread-baking qualities of wheat. Their introduction is planned by the All-Union program for increasing the production of strong wheat grain. Plantations where these techniques are used are situated in 15 rayons of the oblast and occupy 10,000 hectares. The enterprises intend to harvest an average of 30-40 quintals of grain here.

The purpose of the seminar held today in Lipetsk was to comprehensively evaluate the virtues of the new techniques and generalize the experience of their introduction in various regions of the country. Its participants were secretaries of party obkoms and heads of the agro-industrial complex of a number of oblasts of the Russian Federation.

Participating in the proceedings of the seminar were Deputy Chairman of the USSR Council of Ministers Z. N. Nuriyev, USSR Minister of Agriculture V. K. Mesyats, USSR Minister of Land Reclamation and Water Resources N. F. Vasil'yev, Chairman of the USSR State Committee for Supply of Production Equipment for Agriculture L. I. Khitrin, and First Deputy Chief of the Department of Agriculture and Food Industry of the CPSU Central Committee I. I. Skiba.

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## LAND RECLAMATION AND WATER RESOURCES

### CONFERENCE ON VOLGOGRAD OBLAST LAND RECLAMATION

Moscow SOVETSKAYA ROSSIYA in Russian 1 Jul 84 p 1

[Text] Volgograd, 30 [Jun] (TASS) Issues of increasing the effectiveness of irrigated lands and accelerating the pace of their construction were discussed at a conference of the Volgograd Oblast party and economic aktiv, heads of party, soviet and agricultural organs, land reclamation workers, scientists and specialists.

It was noted at the conference that this year the pace of renewing arable land in the oblast has significantly increased. During the first half of the year over 15,000 hectares of irrigated lands were placed in service--considerably more than in all of last year. The structure of planted areas was revised, and harvest programming techniques gained wider use.

But, as emphasized at the conference, the return from each irrigated hectare in the oblast is still low, and the improved lands, which occupy almost 200,000 hectares, are not used productively enough.

Proposals were advanced to improve designing of land reclamation projects and to increase the productivity of irrigation equipment. A great deal of attention was devoted to issues of introduction of scientifically substantiated farming systems, which are the basis for obtaining stable harvests under any weather conditions.

Participating in the conference were Deputy Chairman of the USSR Council of Ministers, USSR Gosplan Chairman N. K. Baybakov, Deputy Chairman of the USSR Council of Ministers Z. N. Nuriyev, USSR Minister of Agriculture V. K. Mesyats, USSR Minister of Land Reclamation and Water Resources N. F. Vasil'yev, Chairman of the USSR State Committee for Supply of Production Equipment for Agriculture L. I. Khitrin, First Deputy Chairman of the RSFSR Council of Ministers L. B. Yerminev, First Deputy Chief of the Department of Agriculture and Food Industry of the CPSU Central Committee I. I. Skiba and executive officials of ministries.

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